Connecticut Siting Council

APPLICATION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

TOWN OF ASHFORD

ASHFORD NORTH FACILITY

JUNE 8, 2007



TABLE OF CONTENTS

EXECUTIVE SUMMARYi								
SITE	ELOCA	TION I	MAP	· · · · · · · · · · · · · · · · · · ·	ii			
AER	IAL PH	ЮТО	•••••		iii			
I.	INTRODUCTION							
	A.							
	B.			ınt				
	C.	App	lication	Fee	4			
II.	SER	VICE A	AND NO	OTICE REQUIRED BY C.G.S. SECTION 16-50 <i>l</i> (b)	4			
Ш.	REQ	REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY						
	A.			ormation				
	В.	Publ	Public Need and System Design					
		1.		ic Need				
		2.	Syste	em Design and Equipment				
			a.	System Design				
			b.	Cellular System Equipment				
		3.		nnological Alternatives				
	C.	C. Site Selection and Tower Sharing		-				
		1.		Site Selection				
	_	2.		er Sharing				
	D.			ormation				
		1.		Facilities				
		2.		rall Costs and Benefits				
		3.		ronmental Compatibility				
			a.	Primary Facility Impact is Visual				
			b.	Solicitation of Agency Comments				
			c.	Non-Ionizing Radio Frequency Radiation				
		,	d.	Other Environmental Issues				
		4.		sistency with Local Land Use Controls				
			a.	Planned and Existing Land Uses				
			b.	Ashford Plan of Conservation and Development				
			c.	Zoning Regulations				
			d.	Inland Wetland and Water Course Regulations	18			

		5.	Local InputConsultations With State and Federal Officials	
		6.		
			a. Federal Communications Commission	19
			b. Federal Aviation Administration	19
			d. Connecticut Department of Environmental Protection	20
			e. Connecticut State Historic Preservation Officer	
	E.	Estimated Cost and Schedule		
		1.	Overall Estimated Costs	21
		2.	Overall Scheduling	21
IV.	CON	ICLUSI	ION	21

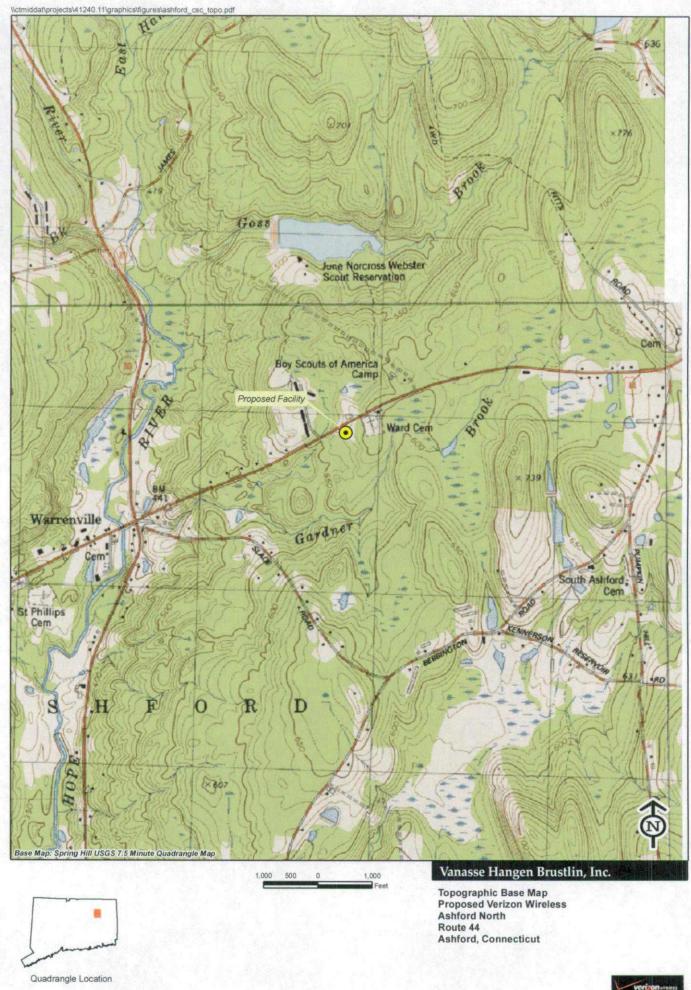
LIST OF ATTACHMENTS

- 1. Ashford North Factual Summary and Project Plans
- 2. Certificate of Service of Application on Government Officials and List of Officials Served
- 3. Legal Notice in the *Chronicle*
- 4. Notice to Landowners; List of Abutting Landowners; Certificate of Service
- 5. Federal Communications Commission Authorization
- 6. Coverage Maps Location of Surrounding Cell Sites
- 7. Antenna and Equipment Specifications
- 8. Site Search Summary
- 9. Visual Impact Evaluation Report
- 10. State and Federal Agency Reviews
- 11. Wetland Delineation Report
- 12. Federal Airways & Airspace Summary Report
- 13. Connecticut Siting Council Application Guide
- 14. Site Lease Agreement

EXECUTIVE SUMMARY

Cellco Partnership d/b/a Verizon Wireless ("Cellco") proposes to construct a telecommunications tower and related facility in the south central portion of the Town of Ashford (the "Ashford North Facility"). The proposed Ashford North Facility would provide for much needed cellular and Personal Communications Service ("PCS") coverage along the heavily-traveled Routes 44 and 89, as well as local roads in the area.

The proposed Ashford North Facility would be located on a 1.96-acre parcel at 174 Ashford Center Road (Route 44) behind the Midway Restaurant. At the site, Cellco would construct a 120-foot telecommunications tower within a fenced compound. Cellco will install twelve (12) panel-type antennas at the 120-foot level on the tower and a 12' x 30' shelter located near the base of the tower. Access to the site would extend from Ashford Center Road over the existing parking area for the Midway Restaurant, then over a new driveway extension, a total distance of approximately 270 feet to the cell site.







Vanasse Hangen Brustlin, Inc.

Aerial Photograph Proposed Verizon Wireless Ashford North Route 44 Ashford, Connecticut



STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

IN RE:	
IN RE.	•

.

APPLICATION OF CELLCO : DOCKET NO. ____

PARTNERSHIP D/B/A VERIZON

WIRELESS FOR A CERTIFICATE OF

ENVIRONMENTAL COMPATIBILITY AND : PUBLIC NEED FOR THE CONSTRUCTION. :

MAINTENANCE AND OPERATION OF A :

WIRELESS TELECOMMUNICATIONS :

FACILITY AT 174 ASHFORD CENTER :

ROAD, ASHFORD, CONNECTICUT : JUNE 8, 2007

APPLICATION FOR CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

I. <u>INTRODUCTION</u>

A. Authority and Purpose

This Application and the accompanying attachments (collectively, the "Application") is submitted by Cellco Partnership d/b/a Verizon Wireless ("Cellco" or the "Applicant"), pursuant to Chapter 277a, Sections 16-50g et seq. of the Connecticut General Statutes ("C.G.S."), as amended, and Sections 16-50j-1 et seq. of the Regulations of Connecticut State Agencies ("R.C.S.A."), as amended. The Application requests from the Connecticut Siting Council ("Council") a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance, and operation of a wireless telecommunications facility in the Town of Ashford, Connecticut (the "Ashford North Facility"). The proposed Ashford North Facility would provide for much needed coverage along the heavily-traveled Routes 44 and 89, as well as local roads in the south central portion of the Town of Ashford. Cellco currently experiences

gaps in coverage at both cellular and PCS frequencies between its existing Ashford West cell site (Cellco's antennas at the 190-foot level of 190-foot tower – 20 Seles Road), and Ashford cell site (Cellco's antennas at the 240-foot level of 300-foot tower – 353 Pumpkin Hill Road).

The proposed cell site would be located on a 1.96-acre parcel located at 174 Ashford Center Road in Ashford (the "Property"). The Property is located in the Town's Commercial zone district and is currently used for commercial (restaurant) purposes. At the Property, Cellco would construct a 120-foot monopole telecommunications tower. Cellco would install a total of twelve (12) panel-type antennas (six cellular and six PCS) with their centerline at the 120-foot level on the tower. The antennas would extend above the top of the tower for an overall height of 123 feet above ground level ("AGL"). Equipment associated with the antennas and a back-up generator would be located within a 12' x 30' shelter located near the base of the tower. All site improvements associated with the proposed facility would be located within a 70' x 70' fenced compound within a 100' x 100' leased area. Access to the Property would extend from Ashford Center Road (Route 44) over the existing parking area for the Midway Restaurant, then over a new driveway extension, a total distance of approximately 270 feet to the cell site. Both the tower and leased area have been designed to accommodate additional carriers. At cellular frequencies (800 MHz), Cellco would provide coverage to an approximately 3.52 mile portion of Route 44, an approximately 2.35 mile portion of Route 89 and approximately 8.9 square miles overall from the Ashford North Facility. At PCS frequencies (1900 MHz), Cellco would provide coverage to an approximately 3.0 mile portion of Route 44, an approximately 1.9 mile portion of Route 89 and approximately 4.1 square miles overall from the Ashford North Facility.

The equipment building at the Property would house radio and related equipment of Cellco, including (a) receiving, transmitting, switching, processing and performance monitoring equipment;

and (b) automatic heating and cooling equipment. A back-up generator would also be installed within the equipment building for use during power outages and periodically for maintenance purposes. The tower and equipment shelter would be enclosed by an 8-foot high security fence and gate, which would be screened. Cellco's equipment building would be equipped with a silent intrusion and systems alarm and will be monitored on a 24-hour basis to receive and to respond to incoming alarms or other technical problems. The equipment building would remain unstaffed, except as required for maintenance. Once the cell site is operational, maintenance personnel will visit the cell site on a monthly basis. More frequent visits may be required if there are problems with the cell site equipment.

Included in this Application as <u>Attachment 1</u>, is a factual summary and set of project plans for the proposed cell site. This summary, along with the other attachments submitted as part of this Application, contain all of the site-specific information required by statute and the regulations of the Council.

In accordance with Paragraph I(F) of the Council's "Application Guide" for Community Antenna Television and Telecommunication Towers, a copy of the Application Guide is included as Attachment 13. The Application Guide contains references to the specific pages of this Application and the attachments where the information required under Section VI of the Application Guide may be found.

B. The Applicant

Cellco is a Delaware Partnership with an administrative office located at 99 East River Drive, East Hartford, CT, 06108. Cellco is licensed by the Federal Communications Commission ("FCC") to operate a wireless telecommunications system in the State of Connecticut within the

meaning of C.G.S. Section 16-50i(a)(6). Operation of the wireless telecommunications systems and related activities are Cellco's sole business in the State of Connecticut.

Cellco has extensive national experience in the development, construction and operation of wireless telecommunications systems and the provision of wireless telecommunications service to the public.

Correspondence and/or communications regarding this Application may be addressed to:

Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, Connecticut 06108

A copy of all such correspondence or communications should also be sent to the applicant's attorneys:

Robinson & Cole LLP 280 Trumbull Street Hartford, Connecticut 06103-3597 (860) 275-8200 Attention: Kenneth C. Baldwin, Esq.

C. Application Fee

The estimated total construction cost for the Ashford North Facility would be approximately Seven Hundred Forty-Five Thousand (\$745,000.00) Dollars. Pursuant to Section 16-50v-1a(b) of the Regulations of Connecticut State Agencies, an application fee of \$1,000 accompanies this Application in the form of a check payable to the Connecticut Siting Council.

II. SERVICE AND NOTICE REQUIRED BY C.G.S. SECTION 16-50*l*(b)

Copies of this Application have been sent by certified mail, return receipt requested, to municipal, regional, state and federal officials, pursuant to C.G.S. Section 16-50*l*(b). A certificate

of service, along with a list of the parties served with a copy of the Application, is included as Attachment 2.

Notice of Cellco's intent to submit this Application was published on June 4 and 5, 2007, by Cellco in the *Chronicle* pursuant to C.G.S. Section 16-50*l*(b). A copy of the published legal notice is included as <u>Attachment 3</u>. A copy of the publisher's affidavit or certificate of publication will be submitted to the Council as soon as it is available.

Attachment 4 contains a certification that notices were sent to each person appearing of record as an owner of property that may be considered to abut the Property in accordance with C.G.S. Section 16-50<u>l</u>(b), as well as a list of the property owners to whom such notice was sent and a sample notice letter.

III. REQUIRED INFORMATION: PROPOSED WIRELESS FACILITY

The purpose of this section is to provide an overview and general description of the wireless facility proposed to be installed.

A. General Information

Prior to the 1980's, mobile telephone service was characterized by insufficient frequency availability, inefficient use of available frequencies and poor quality of service. These limitations generally resulted in problems of congestion, blocking of transmissions, interference, lack of coverage and relatively high cost. Consequently, the FCC, in its Report and Order released May 4, 1981 in FCC Docket No. 79-318, recognized the public need for technical improvement, wide-area coverage, high quality service and a degree of competition in mobile telephone service.

More recently, the federal Telecommunications Act of 1996 (the "Act") emphasized and expanded on these aspects of the FCC's 1981 decision. Among other things, the Act recognized an important nationwide public need for high-quality wireless telecommunication services of all

varieties. The Act also expressly promotes competition and seeks to reduce regulation in all aspects of the telecommunications industry in order to foster lower prices for consumers and to encourage the rapid deployment of new telecommunications technologies.

Cellco's proposed Ashford North Facility would be part of the expanding wireless telecommunications network envisioned by the Act and has been developed to help meet these nationwide goals. In particular, Cellco's system has been designed, and the cell site proposed in this Application has been selected, so as to maximize the geographical coverage and quality of service while minimizing the total number of cell sites required.

Because the FCC and the United States Congress have determined that there is a pressing public need for high-quality telecommunications service nationwide, the federal government has preempted the determination of public need by states and municipalities, including the Council, with respect to public need for the service to be provided by the proposed facility. In addition, the FCC has promulgated regulations containing technical standards for wireless systems, including design standards, in order to ensure the technical integrity of each system and nationwide compatibility among all systems. State and local regulation of these matters is likewise preempted. The FCC has also exercised its jurisdiction over and preempted state and local regulation with respect to radio frequency interference issues by establishing regulations in this area as well.

Pursuant to FCC authorizations, Cellco has constructed and currently operates a wireless system throughout Connecticut. This system, together with Cellco's system throughout its east coast and nationwide markets, has been designed and constructed to operate as one integrated, contiguous system, consistent with Cellco's business policy of developing compatibility and continuity of service on a regional and national basis.

Included as <u>Attachment 5</u> is the FCC's authorization issued to Cellco for its wireless cellular and PCS services in Connecticut. The FCC's rules permit a licensee to modify its system, including the addition of new cell sites, without prior approval by the FCC, as long as the licensee's authorized service area is not enlarged. The Ashford North Facility proposed in this Application would not enlarge Cellco's authorized service area.

B. Public Need and System Design

1. Public Need

As noted above, the Act has pre-empted any state or local determination of public need for wireless services. In Windham County, Cellco holds an FCC License to provide wireless services at both cellular and PCS frequencies. Pursuant to its FCC Licenses, Cellco has developed and continues to develop a network of cell sites to serve the demand for wireless service in the area. Cellco's network currently experiences significant gaps in coverage along Routes 44 and 89, as well as local roads in the south central portion of Ashford. As depicted on the coverage maps included in <u>Attachment 6</u>, Cellco experiences gaps in coverage at both cellular and PCS frequencies along Routes 44 and 89 in Ashford between its existing Ashford West and Ashford cell sites.

2. System Design and Equipment

a. System Design

Cellco's wireless system in general and the proposed Ashford North Facility have been designed and developed to allow Cellco to achieve and to maintain high quality service without interruption from dropped calls and interference.

The system design provides for frequency reuse and hand-off, is capable of orderly expansion and is compatible with other wireless systems. The resulting quality of service compares

favorably with the quality of service provided by conventional wireline telephone service. The wireless system is designed to assure a true cellular configuration of base transmitters and receivers in order to cover the proposed service area effectively while providing the highest quality of service possible. Cell site transmissions are carefully tailored to the FCC's technical standards with respect to coverage and interference and to minimize the amount of power that is radiated. System modulation is narrowband frequency modulation for all voice channels at 30 kilohertz ("kHz").

Mobile telephone switching offices ("MTSOs") in Windsor and Wallingford are interconnected and operate Cellco's wireless systems in Connecticut as a single network, offering the subscriber uninterrupted use of the system while traveling throughout the State. This network is further interconnected with the local exchange company ("LEC") and inter-lata (long distance) carriers network.

Cellco has designed its wireless system in conformity with applicable standards and constraints for wireless systems. Cellco's system is also designed to minimize the need for additional cell sites in the absence of additional demand or unforeseen circumstances.

b. <u>Cellular System Equipment</u>

The key elements of the cellular system are the two MTSOs located in Windsor and Wallingford and the various connector cell sites around the state.

The major electronic components of each cell site are radio frequency transmission and receiving equipment and cell site controller equipment. Cellco's cellular system uses Lucent Flexent® Modular Cell 4.0 cell site equipment to provide complete cell site control and performance monitoring. This equipment is capable of expanding in modules to meet system growth needs. The cell site equipment primarily provides for: message control on the calling channel; call setup and supervision; radio frequency equipment control; internal diagnostics;

response to remote and local test commands; data from the mobile or portable unit in both directions and on all channels; scan receiver control; transmission of power control commands; rescanning of all timing; and commands and voice channel assignment. Additional information with respect to the Lucent Flexent® Modular Cell 4.0 equipment is contained in <u>Attachment 7</u>.

To maintain the reliability and integrity of its network, Cellco, as a matter of corporate policy, installs back-up generators at each of its cell site locations. These generators are appropriately sized to handle the significant electric load requirements of a cell site including Cellco's radio equipment and air conditioning units. These generators allow Cellco to maintain a highly reliable wireless network, insuring that its customers and local emergency service providers can use its wireless services when commercial power to the area is, for whatever the reason, unavailable. Interruptions in commercial power in Cellco's New England market are common and result most frequently from adverse weather conditions.

3. Technological Alternatives

Cellco submits that there are no equally effective technological alternatives to the proposal contained herein. In fact, Cellco's wireless system represents state-of-the-art technology offering high-quality service. Cellco is aware of no viable and currently available alternatives to its system design for carriers licensed by the FCC.

C. Site Selection and Tower Sharing

1. Cell Site Selection

Cellco's goal in selecting cell sites such as the one proposed in Ashford is to locate its facilities in such a manner as to allow it to build and to operate a high-quality wireless system with the least environmental impact. Cellco has determined that the proposed Property location will

¹ Currently, more than 97% of all of Cellco's cell sites, nationwide, maintain on-site back-up generators.

satisfy this goal and is necessary to resolve existing coverage problems and to provide high-quality uninterrupted service along a significant portion of Routes 44 and 89, as well as local roads in the area. At cellular frequencies (800 MHz), Cellco will be able to provide coverage to a 3.52 mile portion of Route 44, 2.35 mile portion of Route 89 and an overall area of approximately 8.9 square miles from the proposed cell site. At PCS frequencies (1900 MHz), Cellco would provide coverage to an approximately 3.0 mile portion of Route 44, an approximately 1.9 mile portion of Route 89 and approximately 4.1 square miles overall from the Ashford North Facility.

The methodology of cell site selection for Cellco's wireless system generally limits the search for possible locations to a specific area on the overall grid for the area. A list of existing towers or other non-tower structures considered is included in Attachment 8. Cellco currently uses many of the existing towers in the immediate area, including those sites identified on the coverage maps as the Ashford West and Ashford cell sites. (See Attachment 6). None of the existing towers can help to resolve the existing coverage problems identified above along Routes 44 and 89 in Ashford. Cellco also regularly investigates the use of existing, non-tower structures in an area as an alternative to building a new tower. Cellco was able to determine early in its site search process that no suitable existing structure existed in the south central portion of Ashford. Descriptions of each of the sites investigated are included in the Site Search Summary (Attachment 8). The Site Search Summary details the reason why each site, other than the proposed Ashford North Facility, was not presented to the Council. The Site Search Summary, together with the site information contained in Attachment 8, support Cellco's position that the site selected represents the most feasible alternatives of the sites investigated.

2. Tower Sharing

Cellco will design the Ashford North Facility so that it could be shared by other wireless carriers. This type of tower sharing arrangement would potentially reduce, if not eliminate, the need for other carriers to build separate towers in this same area in the future. Cellco would also make space on its tower available to the Town's public safety entities if such a need exists.

D. Cell Site Information

1. <u>Site Facilities</u>

Use of the Property would require the construction of a new tower. Cellco would install twelve (12) panel-type antennas (six cellular and six PCS) at the 120-foot level on the tower. The total height of the tower with appurtenances would be 123 feet AGL.

Cellco would install a 12' x 30' single-story equipment shelter near the base of the approved tower to house Cellco's receiving, transmitting, switching, processing and performance monitoring equipment and the required heating and cooling equipment. A back-up generator would be installed within the equipment shelter for use during power outages and periodically for maintenance purposes. The tower and equipment shelter would be surrounded by an 8-foot high security fence and gate, which would be screened by landscaping. (See <u>Attachment 1</u> – Sheet S-3A).

The equipment shelter would be equipped with silent intrusion and systems alarms. Cellco personnel will be available on a 24-hour basis to receive and to respond to incoming alarms. The equipment building will remain unstaffed, except as required for periodic maintenance purposes.

2. Overall Costs and Benefits

Aside from the limited visual impacts discussed further below, Cellco believes that there are no significant costs attendant to the construction, maintenance, and operation of the proposed cell

site. In fact, the public will benefit substantially from its increased ability to receive high-quality mobile and portable wireless service in the Ashford area.² The Ashford North Facility would be a part of a communications system that addresses the public need identified by the FCC and the United States Congress for high-quality, competitive mobile and portable wireless service.

Moreover, the proposed cell site would be part of a system designed to limit the need for additional cell sites in the future.

The overall costs to Cellco for development of the proposed cell site are set forth in Section III.E. of the Application.

3. Environmental Compatibility

Pursuant to Section 16-50p of the General Statutes, in its review of the Application, the Council is required to find and to determine, among other things, the nature of the probable environmental impact, including a specification of every significant adverse effect of the facility, whether alone or cumulatively with other effects, on, and conflicting with the policies of the state concerning the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forests and parks, air and water purity and fish and wildlife.

a. Primary Facility Impact is Visual

The wireless system of which the proposed Ashford North Facility will be a part has been designed to meet the public need for high-quality reliable wireless service while minimizing any potential adverse environmental impact. In part because there are few, if any other adverse impacts,

_

² Businesses across the State have become more dependent on wireless telecommunication services. The public safety benefits of wireless telephone service are illustrated by the improved Connecticut State Police 911 emergency calling system. The 911 emergency calling system is available statewide to all wireless telephone users. Numerous other emergency service organizations have turned to wireless telephone service for use during natural disasters and severe storms when wireline service is interrupted or unavailable. As a deterrent to crime, the general public will further benefit from the Cellular Telecommunications Industry Association's donation of more than 50,000 cellular phones to "Neighborhood Watch" groups nationwide.

the primary impact of facilities such as this is visual. This visual impact will vary from location to location around a tower, depending upon factors such as vegetation, topography, the distance of nearby properties from the tower and the location of buildings and roadways in a "sight line" toward the tower. Similarly, visual impact of a tower facility can be further reduced through the proper use of alternative tower structures; so-called "stealth installations." Where appropriate, telecommunications towers camouflaged as trees, flagpoles, and church bell towers, to name a few, can help to further reduce visual impacts associated with these structures. If deemed appropriate by the Council, Cellco would agree to the installation of a stealth installation at the Property. To soften the visual impact of ground-mounted equipment, Cellco has proposed the installation of an architecturally treated equipment shelter and has developed an extensive compound perimeter landscape plan at the Ashford North Facility. (See Project Plans included in Attachment 1).

Attachment 9 contains a detailed Visual Resource Evaluation Report, prepared by VHB, Inc. (the "VHB Report") that assesses the visual impact of the proposed Ashford North Facility tower. According to the VHB Report the 120-foot tower will be visible, above the tree canopy from only 12 acres, less than one-half of one percent of the 8,042-acre study area. This "year round" visibility is limited to the area in the immediate vicinity of the site location. The year round visual impact of this tower would be "minimal". Seasonal views, through the trees, of the tower would be available from an additional approximately 16-acres of land, again generally limited to the area immediately surrounding the tower site.

There are only three residential homes within 1,000 feet of the proposed Ashford North Facility, the closest of which is located approximately 350 feet to the east of the tower site. The Ashford North Facility is also within 1,000 feet of one building in the Birch Hill apartment complex located to the northwest of the tower site.

-13-

Weather permitting, Cellco will raise a balloon with a diameter of at least three (3) feet at the proposed cell site on the day of the Council's hearing on this Application, or at a time otherwise specified by the Council.

b. <u>Solicitation of Agency Comments</u>

Section 16-50j of the General Statutes requires the Council to consult with and to solicit comments on the Application from the Commissioners of the Departments of Environmental Protection, Public Health, Public Utility Control, Economic Development, and Transportation, the Council on Environmental Quality, and the Office of Policy and Management. In addition to the Council's solicitation of comments, Cellco has, as a part of its National Environmental Policy Act ("NEPA") Checklist, solicited comments on the proposed facility from the U.S. Department of the Interior, Fish and Wildlife Service ("USFWS") and the Connecticut Historic Commission, State Historic Preservation Officer ("SHPO"). In addition, Cellco has reviewed the Connecticut Department of Environmental Protection ("DEP") Natural Diversity Data Base ("NDDB") and determined that, based on DEP instructions, the project will not impact any known occurrences of listed species or significant natural communities and, therefore, DEP review is not required. Attachment 10 contains the USFWS and SHPO response letters, as well as a letter from EBI explaining the DEP/NDDB review process. The USFWS response confirms that no known populations of Federal or State Endangered, Threatened or Special Concern Species occur at the proposed cell site location. The SHPO has confirmed that a facility at the proposed site location will have no effect on historical, architectural or archeological resources listed on or eligible for the National Register of Historic Places.

This review by state administrative agencies furnishes ample expert opinion on the potential environmental impacts from the facility proposed in the Application, in the context of the criteria which the Council must consider.

c. Non-Ionizing Radio Frequency Radiation

In August 1996, the FCC adopted a hybrid ANSI/NCRP Standard for exposure to Radio Frequency ("RF") emissions from telecommunications facilities like the one proposed in this Application. The ANSI Standard was adopted by the State of Connecticut in C.G.S. Section 22a-162 and Section 22a-162a "for the purpose of preventing possible harmful effects in human beings from exposure to electromagnetic fields in the frequency range of 300 Kilohertz (kHz) to 100 Gigahertz (GHz). . .."

To ensure compliance with the applicable standards, the Applicant has performed maximum power density calculations for the proposed cell site according to the methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) ("OET Bulletin 65"). The calculation is a conservative, worst-case approximation for RF power density levels at the closest accessible point to the antennas, in this case the base of the tower, and with all antennas transmitting simultaneously on all channels at full power. The calculations indicate that the maximum power density level for Cellco antennas would be 11.34% of the Standard at the proposed Facility.

d. Other Environmental Issues

No sanitary facilities are required for the proposed Property. The facilities and operations at the proposed Property will not cause any significant air, water, noise or other environmental impacts, or hazard to human health.

Based on agency comments received, Cellco submits that the proposed facility will have no significant adverse effect on scenic, natural, historic or recreational features, and that none of the potential effects from the facility alone or cumulatively with other effects is sufficient reason to deny this Application.

As discussed above, Cellco will install a back-up generator inside a segregated 10' x 12' generator room within its equipment shelter. Adequate safeguards have been designed into Cellco's generator system and room that eliminate, to the greatest extent possible, the potential for environmental impacts associated with the generator. For example, the generator maintains a double-walled fuel tank with leak detection. The generator's operating and leak detection systems are monitored 24/7 by Cellco.

In addition to the safeguards built into the generator unit itself, the concrete floor of the generator room in the equipment shelter is recessed, several inches, creating a bowl-like effect. The floor area inside the generator room is capable of containing the capacity of 120% of all generator fluids (fuel and oil). Leak detection alarms are also installed in the generator room floor and are monitored remotely. All refueling operations occur inside the generator room. Cellco contracts with Clean Harbors Environmental Service to respond to any spills at its cell sites within six (6) hours of an event. Each generator is exercised weekly to ensure that it is operating properly and is inspected and maintained on a regular basis.

4. Consistency with Local Land Use Controls

The Connecticut Siting Council Application Guide for Community Antenna Television and Telecommunication Facilities, as amended on February 16, 2007, requires the inclusion of a narrative summary of the project's consistency with the Town's Plan of Development and Zoning

Regulations, as well as a description of planned and existing uses of the site location and surrounding properties.

a. Planned and Existing Land Uses

The proposed Ashford North Facility would be located on a 1.96-acre parcel owned by P&G Realty, LLC. The property is zoned Commercial. The P&G Realty, LLC property is surrounded by a residential use to the south and east. The property immediately south of the Property appears to be used for residential and business purposes by the landowner. To the north is an existing automotive repair business. To the west is a soon-to-be-developed commercial/retail center.

b. Ashford Plan of Conservation and Development

The Town of Ashford Plan of Conservation & Development 2005 (the "Plan"), does not specifically identify telecommunications towers as a land use consistent or inconsistent with the general planning or conservation policies of the Town of Ashford.

c. Zoning Regulations

According to the Town of Ashford Zoning Map, the Property is located in the "Commercial" zone. Pursuant to Section 4.11.03 of the Town of Ashford Zoning Regulations ("Zoning Regulations"), Telecommunications Sites are permitted in any zone subject to the approval of a Special Permit. A copy of the Ashford Zoning Regulations were submitted, in bulk, along with this Application. Section 4.11.03.C. of the Zoning Regulations identifies certain location preference for the siting of Telecommunications Sites including: 1) on existing structures or utility poles; 2) on existing or approved towers; or 3) new towers on municipal property. As indicated in the Site Search Summary (Attachment 6), there are no existing structures, utility poles or towers in the Ashford North search area that can satisfy Cellco's

coverage objectives. Likewise, according to First Selectman Fletcher, there are no municipal properties in the vicinity of the proposed cell site that could be used for telecommunications purposes.

d. Inland Wetland and Water Course Regulations

The Ashford Inland Wetland and Watercourses ("IWW") Regulations regulate activity within identified wetland or watercourse areas and those upland areas, within 100 feet of a wetland or watercourse; within 150 feet of the Mount Hope River; or within 250 feet of a wetland or watercourse in areas where adjacent slopes exceed 15% or is otherwise determined to be "valuable or sensitive to disturbance". Five (5) copies of the Ashford IWW Regulations were filed, in bulk, with the Council.

On December 27, 2006, Dean Gustafson, Professional Soil Scientist with VHB, Inc., conducted a field investigation at the Property and determined that the facility location did not contain any wetland or watercourse areas that would be impacted by the proposed development activity. The closest wetland area is located on an adjacent parcel, approximately 250 feet to the northwest of the site compound. Copies of Mr. Gustafson's reports are included in <u>Attachment 11</u>.

In accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Council for Soil and Water Conservation, adequate and appropriate soil erosion and sedimentation control measures will be established and maintained throughout the cell site construction period. In addition, Cellco will employ appropriate construction management practices to ensure that no pollutants would be discharged to any nearby watercourse or wetland areas or to area groundwater during the construction process.

According to the Federal Emergency Management Agency Flood Insurance Rate Map,

Community Panel Number 0901650021C (effective December 1, 1981), the facility would not be located in a designated flood zone.

5. Local Input

Section 16-50*l*(e) of the Connecticut General Statutes, as amended, requires local input on matters before the Council. On March 2, 2007, Cellco representatives met with Town of Ashford First Selectman Ralph H. Fletcher to commence the sixty (60) day municipal consultation process. At this meeting, Mr. Fletcher received copies of technical information summarizing Cellco's plans to establish a telecommunications facility in Ashford.

6. Consultations With State and Federal Officials

Attachment 10 and Section III.D. of the Application describe Cellco's consultations with state and federal officials regarding Cellco's proposed Ashford North Facility.

a. Federal Communications Commission

The FCC did not review this particular proposal. As discussed above, FCC approval is not required where the authorized service area is not enlarged.

b. Federal Aviation Administration

As with all of its tower applications, Cellco has conducted the appropriate air-space analysis for the proposed Ashford North Facility to determine if the proposed tower would constitute an obstruction or hazard to air navigation. Cellco's analysis has confirmed, pursuant to FAA standards, that the proposed site tower would not constitute an obstruction or hazard to air navigation and therefore no obstruction marking or lighting would be required. A copy of the Federal Airway & Airspace Summary Report is included in <u>Attachment 12</u>.

c. United States Fish and Wildlife Service

According to the USFWS, telecommunications facilities are not likely to adversely affect any federally-listed or proposed species provided the facility complies with certain evaluation criteria. (See March 6, 2007 letter from Anthony P. Tur, USFWS Endangered Species Specialist, New England Field Office - Attachment 10). A review of the list of threatened and endangered species locations attached to Mr. Tur's letter confirms that no federally-listed endangered or threatened species are known to occur in Windham County, Connecticut.

d. Connecticut Department of Environmental Protection

(1) Environmental and Geographic Information Center

As discussed above based on a review of the DEP/NDDB, the project will not impact any known occurrences of State listed species or significant natural communities.

(2) Bureau of Air Management

Pursuant to R.C.S.A. § 22a-174-3, the on-site emergency back-up generator proposed as a part of this Application will require the issuance of a permit from the DEP Bureau of Air Management. As proposed, this emergency generator will be run only during the interruption of utility service to the cell site and periodically as required for maintenance purposes. Cellco will obtain the necessary permit prior to installing the generator at the Ashford North Facility.

e. <u>Connecticut State Historic Preservation Officer</u>

As discussed above, <u>Attachment 10</u> also includes the SHPO's determination that the proposed Ashford North Facility will have <u>no effect</u> on historic, architectural or archeological resources listed on or eligible for the National Register of Historic Places.

E. Estimated Cost and Schedule

1. Overall Estimated Costs

The total estimated cost of construction of the proposed facility is \$745,000. This estimate includes:

(1)	Cell site radio equipment of approximately	\$450,000
(2)	Tower, coax and antenna costs of approximately	150,000
(3)	Power systems costs of approximately	20,000
(4)	Equipment building costs of approximately	50,000
(5)	Miscellaneous costs (including site preparation and installation) of approximately	75,000

2. Overall Scheduling

Site preparation and engineering would commence following Council approval of Cellco's Development and Maintenance ("D & M") plan and are expected to be completed within two to four weeks. Due to the delivery schedules of the manufacturers, installation of the building and installation of the tower are expected to take an additional two weeks. Equipment installation is expected to take an additional two weeks after installation of the building and installation of the tower. Cell site integration and system testing is expected to require two weeks after equipment installation.

IV. CONCLUSION

Based on the facts contained in this Application, Cellco submits that the establishment of the Ashford North Facility, at the Property will not have any substantial adverse environmental effects. A public need exists for high quality mobile and portable wireless service in the Town of Ashford in Windham County, as determined by the FCC and the United States Congress, and a

competitive framework for providing such service has been established by the FCC and the Telecommunications Act of 1996. Cellco submits that the public need far outweighs any possible environmental effects resulting from the construction of the proposed cell site. Moreover, the cell site proposed in this Application will help to provide a level of service in the area that is commensurate with the public demand currently and in the foreseeable future.

WHEREFORE, Cellco respectfully requests that the Council grant this Application for a Certificate of Environmental Compatibility and Public Need for the proposed Ashford North Facility.

Respectfully submitted,

CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS

Kenneth C. Baldwin, Esq.

Robinson & Cole LLP 280 Trumbull Street

Hartford, Connecticut 06103-3597

(860) 275-8200

Attorneys for the Applicant